

Artificial Fish Habitats/Fish Aggregating Devices

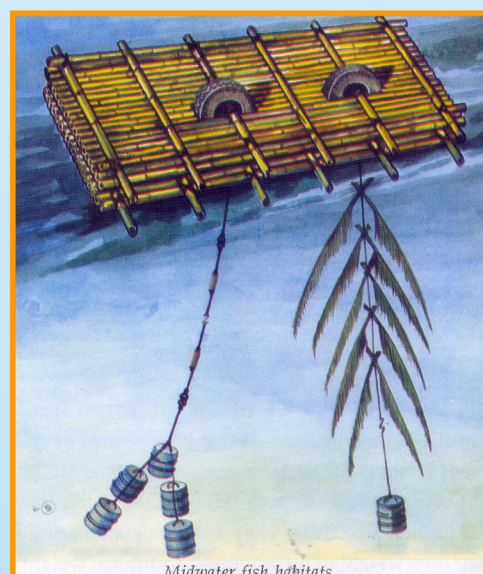
Brief Description

- ★ An object or a construction which promotes an ecosystem and provides habitat for fishes
- ★ A device for increasing fish biomass in the inshore areas.
- ★ AFH attracts shelter and concentrate fishes and helps to increase fish production in coastal areas.
- ★ Enables fisherfolk to fish near the shore without spending much time and energy to locate fish in far away areas.
- ★ In AFH areas, the catch per unit effort is higher compared to non-AFH areas.
- ★ AFH areas form additional fishing grounds to the artisanal fisherfolk.



Types of AFH

- ★ Artificial Reef or bottom AFH placed on the sea bottom:
Materials : Old tyres, concrete structures of different shapes, fibre-glass-re-inforced plastic (FRP), High Density Polyethylene(HDPE), Weighted logs and branches of trees.
- ★ Surface AFH anchored or drifting near the surface: Anchored floats or bamboo rafts are used.
- ★ Midwater AFH anchored in the water column: A log uses as float from which a rope hangs to the bottom in shallow waters. A stone is used as a weight & coconut leaves are attached along the rope.

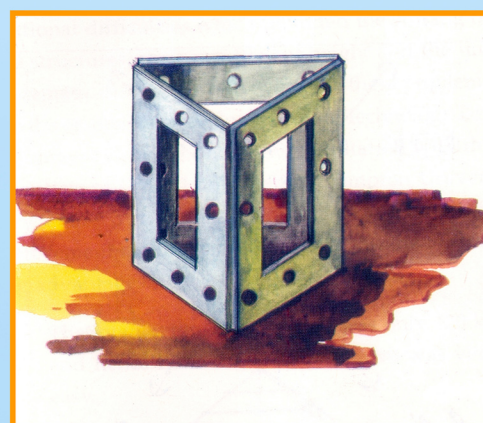


Selection of reef site & device

- ★ A firm sand or shell bottom is suitable to prevent subsidence.
- ★ Bottom profile should be flat or gently sloping.
- ★ Site nearer to a fishing village will simplify the logistics of installation & to minimize travel time.
- ★ Sites with strong tidal currents prone to erosion, river mouths where siltation may bury the reef, soft clay, silt and sediments, high wave energy locations, areas of seasonally shifting sand etc. should not be considered.
- ★ Commercial fishing areas: operating fisherfolk should be convinced of its advantages.
- ★ Material: A triangular ferrocement module of 5 ft :

Advantages

- Total weight is 120 kg & handling & placement are easy.
- Provides maximum surface areas for epifaunal growth.
- Design helps to function effectively in different positions.
- Ferrocement helps to reduce cost of the device.
- Enhances economic returns and sustainable fisheries development.



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